- 17. Saunders, E. W.: Diabetes in Relation to Surgery, Ann. Surg., 94:161 (Aug.), 1931.
- 18. Eliason, E. L.: Surgery of Diabetic Gangrene, Ann. Surg., 98:1 (July), 1933.
- 19. Leonard, W. E.: Surgery of the Diabetic, Am. J. Surg., 27:277 (Feb.), 1935.
- 20. Judd, E. S., et al.: Surgery in Diabetes, J. A. M. A., 86:1107 (April 10), 1926.
- 21. Maes, W.: The Surgery of Diabetes, Surg., Gynec., and Obst., 51:700 (Nov.), 1930.

DISCUSSION

EMILE HOLMAN, M.D. (Stanford University Medical School, San Francisco).—Only complete agreement with the authors is possible in their able treatment of the need of fluids, and more fluids, in the care of the diabetic. Too often but a minimum attention is paid to the importance of maintaining in all conditions of illness or operative care an adequate fluid supply to insure a proper balance between intake and output. It is only recently that total blood volume has been accorded the importance it deserves, particularly in the period of water deprivation that precedes any operation to be performed under a general anesthesia. Patients are denied replenishment of body fluid at the time of greatest need. Accordingly, it cannot be too strongly emphasized that before any major operation the deprivation of water by mouth should be counteracted by either subcutaneous or intravenous infusions—given before operation as well as after operation.

The site of amputation is determined by the extent of infection, the severity of arteriosclerosis, the degree of patency of arteries and, obviously, by the amount of demonstrable gangrene. Occasionally, in the presence of a partially gangrenous digit, largely the result of infection which has developed in spite of palpable dorsalis pedis and posterior tibial arteries, we have been content to control the diabetes, and later perform an amputation of the toe. Gangrene and infection of the foot occur on occasion in the presence of a very vigorously beating popliteal vessel. Amputation below the knee has been performed and good healing obtained. Mid-thigh amputations are obviously preferable in elderly patients, with extensive obliteration of the vascular tree.

WILLIAM C. BOECK, M.D. (1919 Wilshire Boulevard, Los Angeles).—This paper, recounting the experience of the authors in the medico-surgical treatment of diabetic patients requiring operation, illustrates most beautifully how excellent results are obtained by the cooperation of the internist and surgeon. These splendid results in this study were secured because both the internist and surgeon were familiar with the fundamental necessities of the preoperative, operative, and postoperative care of the diabetic patients, not only from the medical but from the surgical viewpoint as well. It follows, therefore, that while it is desirable for internists and surgeons to cooperate in the care of these diabetic surgical patients, yet the results will not be ideal if either one is lacking in the knowledge required of each. The internist should know the medicodietetic management of diabetes in order that the diabetic state may be balanced and controlled, and that any disturbance in body chemistry may be completely corrected, or as nearly as possible. The surgeon, on the other hand, must also have this knowledge in part and, above all, should have had experience in diabetic surgery. This will enable him to make a wise selection of the type of anesthesia, operation, and with the internist he will see that the postoperative care is proper in order to avoid complications

Fortunately, most operations upon diabetic patients are elective, and only occasionally is an emergency operation necessary. Therefore, there is adequate time to control the glycosuria of the patient by diet and insulin if necessary. No patient should be submitted to operation unless his diabetes is well under control. If this is not done, and the operation is performed while there is marked glycosuria and a high blood sugar, acidosis and probably coma will ensue postoperatively, since operations like infections increase the severity of the diabetes.

and possible death from coma.

It follows that diabetic patients who have been operated upon must be followed closely after operation and their glycosuria cleared up by adequate insulin dosage, along with the other items of postoperative care as given in this paper. I do not feel it is necessary, however, to do this by repeated blood-sugar determinations as practiced by the authors. On our own diabetic service we find it only necessary to have blood-sugar determinations at four to six hours postoperatively, perhaps again at ten or twelve hours, and then at intervals of twenty-four hours. We are able to ascertain the diabetic state by urinalysis for sugar alone, and prescribing insulin as necessary at intervals of one or two hours. In order to carry out such examinations, we employ indwelling catheters in our patients, and to date there have not been any urinary infections following such procedure.

I wish it were possible for all diabetic patients to have the coöperation of both internist and surgeon whenever surgery, such as was accorded the patients upon which this paper is based, is necessary. Too frequently the surgeon acts alone, and asks the dietitian for a "diabetic diet" with no prescription as to carbohydrate, protein and fat constitution. Insulin is given, but often not enough to control the glycosuria, or to clear up the acidosis before the operation is performed, with the results that the patient may never awaken, death occurring from diabetic coma. It is sad, indeed, to know such occurrences are still taking place in some of our hospitals, for it is no improvement over preinsulin days. Too bad, perhaps, that the surgeon was not familiar with the book "Diabetic Surgery," written by McKittrick and Root. Would it be asking too much if the hospitals had, as a requirement, that all diabetic patients who are to be operated upon must have consultation from an internist trained in diabetic management, even as we make it mandatory that internists consult upon cases of therapeutic abortion? Certainly, the demand is equally as important from the standpoint of the patient, the hospital, and the physician in charge.



James B. Graeser, M.D. (2940 Summit Street, Oakland).—Although general principles of procedure may be discussed in a paper of this type, it is impossible to summarize or present accumulated experience, except in its broader aspects. As stressed by the authors, success in this particular field is dependent upon the combined effort of the internist experienced in handling diabetes under surgical conditions and the surgeon who is "diabetically minded." In elective operations a severe diabetic may be prepared for operation and controlled in the postoperative period with but little disturbance. The emergency operation in poorly controlled cases, on the other hand, presents a hazard greatly increased by the diabetic factor.

The authors' discussion of the postoperative care of laparotomies presents a model procedure.

MEDICINE AND NATIONAL POLICY*

By Morris Fishbein, M.D. Chicago, Illinois

SINCE the earliest times the care of the public health has been recognized as of the greatest importance in the maintenance of any nation. As long ago as 1875, Dr. Henry Bowditch suggested that the American Medical Association support the appointment of a Minister of Health in the cabinet, and this was adopted by the House of Delegates in 1876. Today it is recognized that our government—federal, state, and local—is already intimately concerned in matters of health. Of the two million beds available for medical care, almost a

^{*} A digest of the address given at the annual meeting of the Los Angeles County Medical Association on December 2, 1937, by the editor of The Journal of the American Medical Association. From the Bulletin of the Los Angeles County Medical Association.

million are in government-controlled institutions. Our federal departments have many medical functions such as the United States Public Health Service in the Treasury Department, the Food and Drugs Administration under Agriculture, Maternal and Child Welfare in the Labor Department, the care of the Indians and institutions for the insane in the Interior Department, Coast Guard in the Department of Commerce, and many other functions scattered under some of the special commissions. Yet today the vast majority of the care of the people of the United States in illness rests on the practitioners of medicine, a burden which they have voluntarily assumed and one which they do not propose to relinquish until they are satisfied that some other system will give better medical service to more and more people.

FOREIGN STATE-CONTROLLED SYSTEMS OF MEDICAL PRACTICE

In the organization of many foreign nations state-controlled systems of medical practice have been introduced to meet conditions which prevailed among their peoples. There is no good evidence that any one of these systems is yet recognized as an answer to the problem of adequate medical service for all of the people. The most that can be said for any of them is that it is an improvement on what those people had before. Today under our system of medical care we have the lowest rates for death, for infant mortality and for most of the infectious diseases that prevail anywhere in the world. Is there any good evidence that a radical change in our plan of medical care would bring about still further advancement? Actually the evidence seems to indicate that any fundamental revolution would depreciate the quality of medical care, inhibit initiative, and at the same time vastly increase the costs of the service rendered.

EVOLUTION OF MEDICAL PRACTICE IN AMERICA

Our system of medical care is a logical evolution of personal medical practice to meet every need as it has arisen—a process of evolution which still goes on, adapting itself smoothly to the needs of the new mechanized civilization. For every new problem organized medicine has developed its advisory councils, and these have consistently sought for higher standards and a wider application of the best available medical care. The Council on Medical Education and Hospitals has done more to raise the standards of medical education and hospital service than any governmental agency has accomplished or could accomplish. It accomplishes more by voluntary action with high ideals that could be achieved by any federal agency slowly unwinding the red tape of governmental inspection, and forcing action by the labored processes of legal procedure. Education and voluntary action in the field of health have invariably brought about great reforms with more facility than have been achieved by the pressure of confused, hasty and unscientific legislation.

THE FERMENT OF 1927: WHAT IT HAS GIVEN US

Since 1927 a ferment has been agitating the medical scene. It is the new concept of social service and the apotheosis of the so-called underprivileged. It is a social philosophy which places the needs of four or five million indigents, many of them trained to indigency by superlative coddling, above the health and welfare of forty million workers and their families. The campaign has been waged with abuse and vilification of the medical profession, with blandishments and appeals to cupidity, with slogans and with threats. We have heard that "everyone is entitled to the best of medical care for a price that he can afford to pay," an ideal never yet realized in any nation or in any community in this world. We have been told that the "doctors must develop a plan or the Government will develop one for them." In response the physicians have developed hundred of plans now being tried in many communities, knowing that there is no single formula or ritual that will answer for every community any more than there is a panacea for every syndrome or complication of symptoms.

SOME "FOUNDATION PROPONENTS" OF COMPULSION HEALTH INSURANCE

The Milbank Foundation promoted compulsory sickness insurance, spending many hundreds of thousands of dollars in its promotion, and it has departed from such propaganda as one of its functions. The Rosenwald Foundation has spent equally for at least a decade in promoting hospital insurance, and today less than one per cent of our population has chosen to avail itself of such insurance and the Rosenwald Foundation has closed up its department of medical service. Mr. E. A. Filene urged a half-dozen different panaceas through the Twentieth Century Fund, and the latest activity of that group has been the development of coöperatives for medical care among employees of the Home Owners' Loan Corporation and among employees of the Federal Farm Loan Banks, with the concept that a few physicians employed full time can give adequate medical care to many thousands of people on a contract basis. No one has ever demonstrated that any such a system of medical care even approximates in quality the kind of medical service that is available to the majority of workers in the United States with even less income than is given to these employees of the Government.

AMERICAN FOUNDATION STUDIES IN GOVERNMENT

Now come the principles and proposals emanating from the studies of the American Foundation Studies in Government. Behind these principles and the signatures of the 430 physicians who signed them is a record of political manipulation which should be better known to the medical profession and to the people. This manifesto has been heralded as a "revolt" in the American Medical Association in behalf of state medicine. Yet in a

period of six months there were only 430 signitures and already great numbers of the signers have withdrawn their names. Today we know that the circulation of this manifesto was planned and designed to impress the executive and legislative branches of our federal government with the view that the American Medical Association is disorganized, nor representative of medical thought throughout the nation, and opposed to the best interests of the people. Who may profit from such evidence of disorganization? Is there any proof that self-appointed Committees of Physicians are any better able to represent the opinion of the American medical profession than the democratically chosen House of Delegates of the American Medical Association? The representatives of the 106,000 physicians who constitute the membership, the largest in the history of the Association, actually 80 per cent of the reputable practicing physicians of our country, have declared themselves opposed to any fundamental change or revolution in the development, distribution or payment for medical service. They await evidence from some of the many plans now undergoing experimentation in various places, that a new technique is desirable and safe for the people. That is the scientific method.

MINISTER OF HEALTH IN THE PRESIDENT'S CABINET

The impression has been circulated that the American Medical Association opposes a Minister of Health in the Cabinet. This is absolutely untrue, and represents again the manner in which truth is manipulated to place the medical profession in an unfavorable light. In reorganization of our federal government affairs at least three proposals have been made relative to the place that should be occupied by medicine and the care of the public health. What medicine fears is the possibility of a single ministry to be concerned with the care of the indigent, unemployment, social service, education and public health. Here there is the possibility a single Minister of Indigency may be made superior to health or education. Out of such an establishment will come inevitably worse confusion and less efficiency than we have ever had in the past.

SCIENTIFIC PLANNING NEEDED

Obviously what is needed now is not a plan, but scientific planning. At its annual session in June, 1937, the American Medical Association reaffirmed its willingness to do its utmost today as it has in the past, to provide adequate medical service to those unable to pay either in whole or in part. It has urged that in every county the county medical society take the leadership in calling into coöperation health departments, community chests, and social service organizations, to ascertain the needs in that county and to work out suitable provisions for meeting those needs. In June, 1937, the American Medical Association officially reaffirmed its willingness on receipt of direct request to coöperate with any governmental or other qualified agency

and to make available the information, observations and results of investigations together with any facilities of the Association. Thus far no call has come from any governmental or other qualified agency for the coöperation of the American Medical Association in studying the need of all or of any groups of people for medical service, or to determine to what extent any considerable proportion of our public are suffering from lack of medical care. The offer still stands as evidence of the willingness of the American Medical Association to aid in finding solutions for the problems that now prevail.

WORK OF COUNTY MEDICAL SOCIETIES

In many places throughout the United States today county medical societies already assume fully the burden of medical care for the indigent. In some places, under the leadership of county medical societies, all agencies concerned with the care of the sick and with preventive medicine, are working on plans to extend such care and at the same time to avoid duplication, inhibit waste, and prevent neglect. The Social Security Board, charged with the handling of unemployment and old age insurance, is making extensive studies of sickness and its care, although not yet has there been any report from that body as to the needs of the people or any recommendation as to how these needs shall be met. If the answer is to be sickness insurance, as it has been intimated the Dodd report would have recommended in California, let it be remembered that under such a system the burden falls wholly, after all, upon the worker. He pays up to 3 per cent of his wages, the employer contributes an additional sum which is then added to the costs of goods that the worker buys, and finally the Government contributes a portion out of the taxes that the worker pays. The end-result is a bureaucracy with two new government employees for every physician who gives medical service, and a system of red tape which diminishes the amount and quality of service that the physician can give. And when the bills become too great the government makes it even by diminishing the amount of money paid to the doctor for his service, or by recommending that the patients have less attention and less medicine for the illnesses covered by the system.

AMERICAN MEDICINE TODAY

American medicine, now superbly organized on a democratic basis, speaking with the voices of more than one hundred thousand physicians, promises again to do its utmost in coöperating with all of the other agencies now available to supply a high quality of medical service for all of the people. In doing so, however, it must conserve those features of medical practice which time and training and experience have shown to be absolutely essential to a high quality of medical care. The best results will never be achieved by a revolution in the organization and administration of medical service. They must come by a steady, persistent evolution.

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